

High Definition Color Monitors

# HTM3203/2003D/ HTM1003



The HTM3203/2003D/1003 are High Definition Color Monitors developed with Ikegami's technological know-how, acquired through years of HDV research.

The HTM3203/2003D/1003's exceptional performance meets all video criteria, including high-fidelity video reproduction, stability, and operating flexibility, demonstrating the value of HDTV.

The system such as 1920 x 1080/59.94/2:1, the picture height and the vertical position can be monitored by adjustment.

# HTM3203/2003D/1003



**HTM3203 32-inch HD Monitor**



**HTM2003D 20-inch HD Monitor**



**HTM1003 10-inch HD Monitor**

## ■Features

- High Definition in-line gun, dot mask CRT (mask pitch 0.34mm for HTM3203, 0.28mm for HTM2003D, 0.28mm for HTM1003) assures Horizontal resolution of 1000Tvlines for HTM3203, 900TV lines for HTM2003D(at 1125mode) 500TV lines for HTM1003.
- The circuits are all digitally controlled with 10 bit D/A converter (HTM3203/2003D).
- Three different Color temperatures can be placed in memory: 6500°K, 9300°K are standard, and another of your choice (HTM3203/2003D).
- Beam Feedback System provides long-term white balance stability.
- Two Y/Pb/Pr inputs or two RGB inputs are front panel selectable.
- Two SYNC/HD inputs and one VD input are also standard (HTM3203/2003D).
- Cross Hatch signal, Window signal (100%) and full-white signal (50%) can be utilized for checking deflection linearity, white balance and purity etc (HTM3203/2003D).
- Degauss and rotation functions permit correction of purity error due to earth's magnetism (Rotation: HTM3203/2003D).
- CRT circuit protects against over-current and over-load, X-ray radiation or CRT burn.
- HTM2003D can be mounted in a 19-inch rack with a 15-3/4-inch height.
- HTM2003D supports automatically both HDTV and NTSC (line-doubled 1050i).
- HTM2003D permits automatic color temperature calibration when used with the ASP-15HD auto setup probe (Option). If a unique color temperature is stored in memory, multiple monitors can be automatically calibrated to the same color temperature.
- The HTM1003 can be operated by both AC and DC power supplies.
- Exclusive models for HD SDI input/output are also available (20-inch: HTM2004, 10-inch: HTM1003).

## ■ Specifications

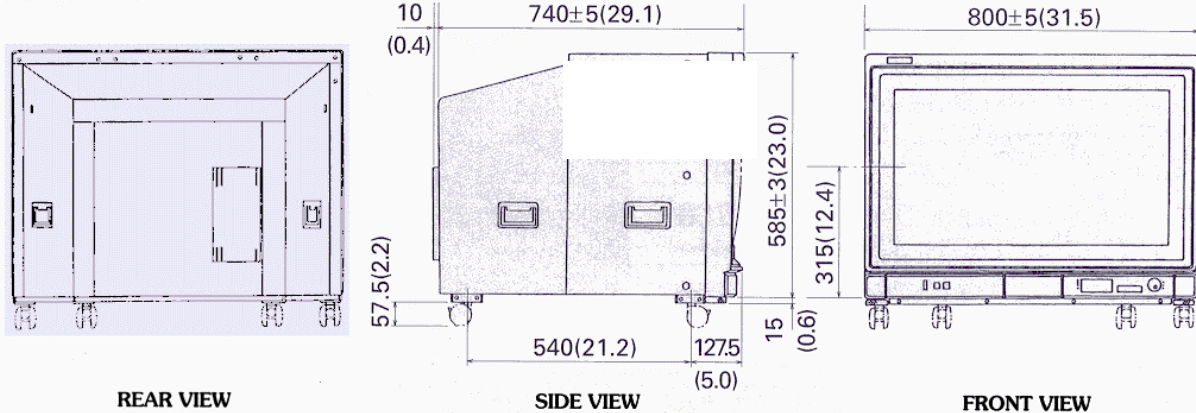
	HTM3203	HTM2003D		HTM1003
		<1125 mode>	<1050 mode>	
● Input Signal Format				
Scanning Lines	1125	1125	525 / 1050	1125
Frames per Second	30	30	60 / 30	30
Interlace Ratio	2:1	2:1	Non interlace/ interlace 2:1	2:1
Aspect Ratio	16:9	16:9	16:9 / 4:3	16:9
Horizontal Scanning Frequency	33.75kHz	33.75kHz	31.5kHz	33.75kHz
Vertical Scanning Frequency	60Hz	60Hz	59.94Hz	60Hz
● Input Signal Types				
Video	R,G,B	2ch	selectable on front panel	2ch
	Y,Pb,Pr	2ch	selectable on front panel	2ch
Sync	SYNC/HD	2ch	selectable on front panel	2ch
	VD	1ch	selectable on front panel	1ch
● Input Signal Level				
Video	Y,G	VS : 1.0Vp-p or V : 0.7Vp-p		
	Pb,Pr	+/- 0.35Vp-p		
	R,B	0.7Vp-p(White signal is positive)		
Sync	SYNC	+/- 0.3Vp-p		
	HD,HV	2.0V p-p		
Input Impedance		75 ohm or high impedance bridge connection		
Video Output Level		35Vp-p ( CRT drive output level, R-ch video component only)		
CRT	In-line gun dot-type shadow mask high resolution CRT Mask pitch : 0.34mm	In-line gun dot-type shadow mask high resolution CRT Mask pitch : 0.28mm		In-line gun dot-type shadow mask high resolution CRT Mask pitch : 0.28mm
Screen Size (Wide Screen)	670(W) x 377(H)mm Aspect ratio : 16:9	400(W) x 225(H)mm Aspect ratio : 16:9	300(W) x 225(H)mm Aspect ratio : 4:3	152(W) x 86(H)mm Aspect ratio : 16:9
Input Voltage	AC100V~120V, 50/ AC200V~240V, 50/ 60Hz, single phase	60Hz, single phase		AC100V~120V 50/60Hz, single phase AC200V~240V, 50/60Hz, single phase DC12/24V
Power Consumption	450VA or less	400VA or less		90W or less
Operation		Continuous		
Installation Place		Indoor		
Ambient Temperature		0 degree C ~ 40 degree C(+32degreeF~+104 F)		
Relative Humidity		10% ~ 90%(non-condensing)		
Dimensions (Excluding gum foot)	800(W) x 600(H) x 740(D)mm (31.5 x 23.6 x 29.1 inches)	450(W) x 399(H) x 544(D)mm (17.7 x 15.7 x 21.4 inches)		W222 x H213 x D400mm (8.7 x 8.4 x 15.7 inches)
Weight	Approx. 80kg	Approx. 40kg		Approx. 11kg
● Resolution				
Horizontal	(at center)	1000 lines or more	900 lines or more	500 lines or more
	(in corner)	800 lines or more	800 lines or more	500 lines or more
Vertical	(at center)	750 lines or more	660 lines or more	500 lines or more
	(in corner)	750 lines or more	650 lines or more	400 lines or more
Voltage Fluctuations		Stable operation is ensured with +/- 10% lines voltage fluctuations referenced to the rated value.		
Frequency Response		With reference to rated output referenced to 500kHz, up to the R, G, B CRT drive output from the video input terminal 60Hz~25MHz : +/- 1dB 25MHz~30MHz : +1dB,-3dB Over 30MHz : Dropping characteristics		output from the video input terminal 60Hz~17MHz +1dB,-3dB
Waveform Distortion		With reference to the rated output, up to the R, G, B CRT drive output from the video input terminal Sag : 5% or less ( with 60Hz square wave signal ) Overshoot : 5% or less ( with symmetrical square wave signal of line frequency )		
Aperture Correction		+6dB or more is adjustable at 25MHz ~ 5MHz with maximum aperture correction level.		+6dB or more is adjustable at 10MHz ~ 5MHz with maximum aperture correction level.
Noise		With reference to the rated output, at R, G, B CRT, drive output with video input from the video input terminal Synchronous : -46dB or more Random : -50dB or more Hum : -50dB or more		
Sync Stability		Stable operation is ensured within +/-6dB referenced to the rated value.		
Deflection Amplitude		Adjustable to the rated picture size with an aspect ratio of 16:9		
Deflection Distortion		Within +1% of picture height ( both deflection linearity and raster distortion )		
● Centering Control				
Horizontal(H)		10mm or more		
Vertical(V)		10mm or more		
● Retrace Time				
Horizontal(H)		12% or less		
Vertical(V)		6% or less		
Hum Oscillation		0.2mm or less		
● High Voltage				
Tolerance	28kV +/- 1kV	27kV +/- 1kV		20kV +/- 1kV
Regulation	(With reference to 300uA for fluctuations of 0 to 600uA)+/-3 or less	With reference to 100uA for fluctuations of 0 to 300uA +/-3% or less		
Convergence	Inside a circle with diameter 90% of picture height : 0.5mm or less Inside a circle with diameter 90% of picture width : 0.7mm or less	Inside a circle with diameter of 90% of picture height : 0.4mm or less Inside a circle with diameter of 90% of picture width : 0.5mm or less		
● Memory				
ROM	16K byte			----
RAM	2K byte			----
Retention period	Approx. 10 years			----

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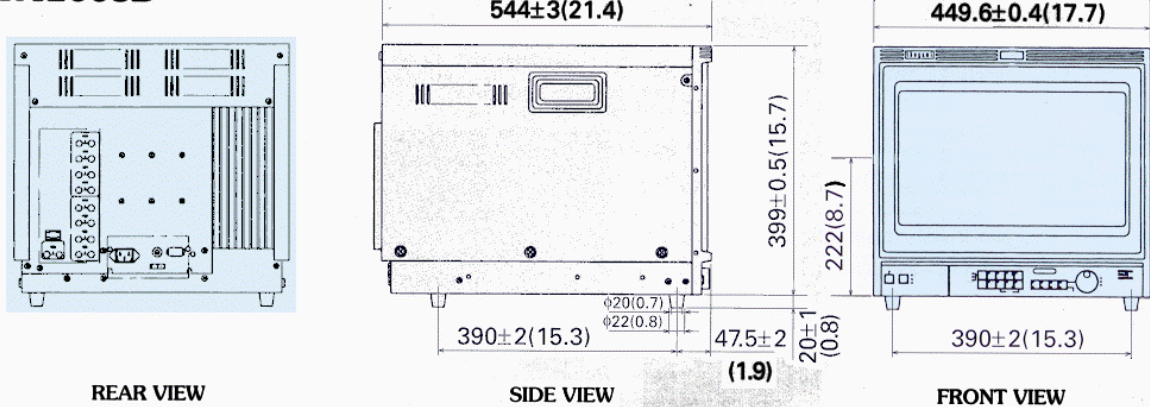
## ■ Dimensions

Unit:mm (inch)

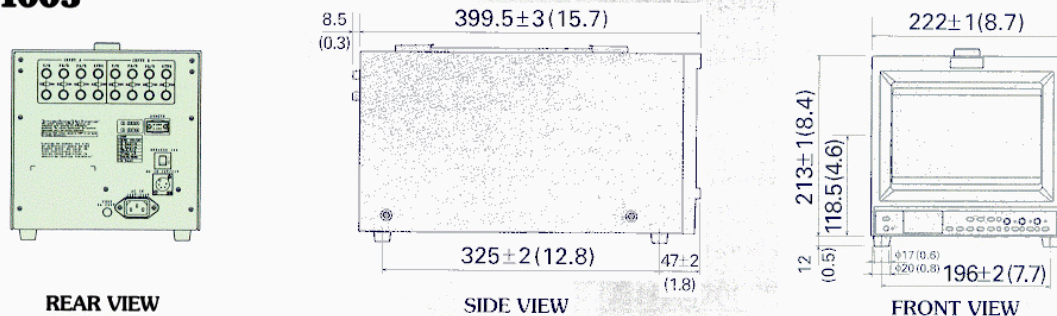
### HTM3203



### HTM2003D



### HTM1003



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